## Great Basin Coordination Center Fuels and Fire Behavior Advisory

Updated July 7, 2016

Subject: Low fuel moistures coupled with heavy fine fuel loading after a long period of dry and hot weather over Western/Northern Nevada into Southeast Oregon and Southwest Idaho point to continued potential for extreme fire behavior. This threat is especially pronounced in locations with sagebrush with heavy fine fuel loading in the understory; particularly when fires occur in conjunction with sustained winds greater than 20 mph.

**Discussion:** Fire behavior increased from very high to extreme over Northern Nevada and Southeast Oregon in early July, with forecasts indicating Southwest Idaho will become extreme later in July. Hot and dry conditions continued throughout much of June into early July, with multiple periods of record high temperatures, pushing live fuels to rapidly cure and dead fuels to dry further. Near to above-normal winter precipitation, along with wet spring weather have resulted in above normal fine fuel loading across the northern half of Nevada. This loading is reported to be 2-3 times above average in some areas.

Precipitation is predicted to be less frequent over this area throughout July, along with higher frequencies of gusty winds. The U.S. Drought Monitor shows Western/Northwest Nevada and Southeast Oregon to be in moderate to severe drought, with abnormally dry conditions further east. The Energy Release Components (ERC) across western and northern Nevada are tracking above normal for early July. Live fuel moisture has decreased rapidly to near record minimums in many areas due to the extreme heat and drying period in June.

## **Concerns to Firefighters and the Public:**

- Anticipate flashy fine fuels and pinyon-juniper to ignite easily and exhibit extreme rates of spread.
- Anticipate dust devils and fire whirls to develop in hot, dry and unstable conditions; especially in fine flashy fuels. Fire whirls will rapidly increase fire behavior to extreme conditions, which can easily jeopardize control lines and quickly increase fire growth rates.
- Anticipate large areas to be consumed in all fuel types in a short time periods, even in low slope and wind conditions.
- Expect longer burn periods and higher intensity burns; especially at mid to higher elevations.
- Anticipate fires to exhibit: extreme rates of spread, elongated flaming fronts, increased fire brands resulting in more long range spotting. These factors will increase resistance to control and promote flare-ups on direct lines.
- Short periods of precipitation and higher relative humidity will moderate fire behavior for short time periods, however expect hot and dry weather to quickly dry fine fuels and return fire behavior conditions to extreme.
- Don't be fooled by low fine fuel heights. Fine fuel loadings are dense and continuous and will support extreme rates of spread.

## **Mitigation Measures:**

- Review evacuation plans in communities that may be affected.
- Consider indirect tactics.
- Use larger safety zones than recommended and escape to them sooner.
- Ensure firefighters have good anchor points keeping one foot in the black.
- Lookouts-Communications-Escape Routes-Safety Zones
- Establish trigger points and constantly re-evaluate tactics/weather/fire behavior to ensure safety.
- Consult the latest weather and fire danger information at http://gacc.nifc.gov/gbcc/.

Area of Concern: Areas of concern include western/northern Nevada, Southeast Oregon below 5,500' and Southwest Idaho, especially in the heavy fine fuel loading and sagebrush as rainfall has still remained non-existent in many areas with very low fuel moistures.